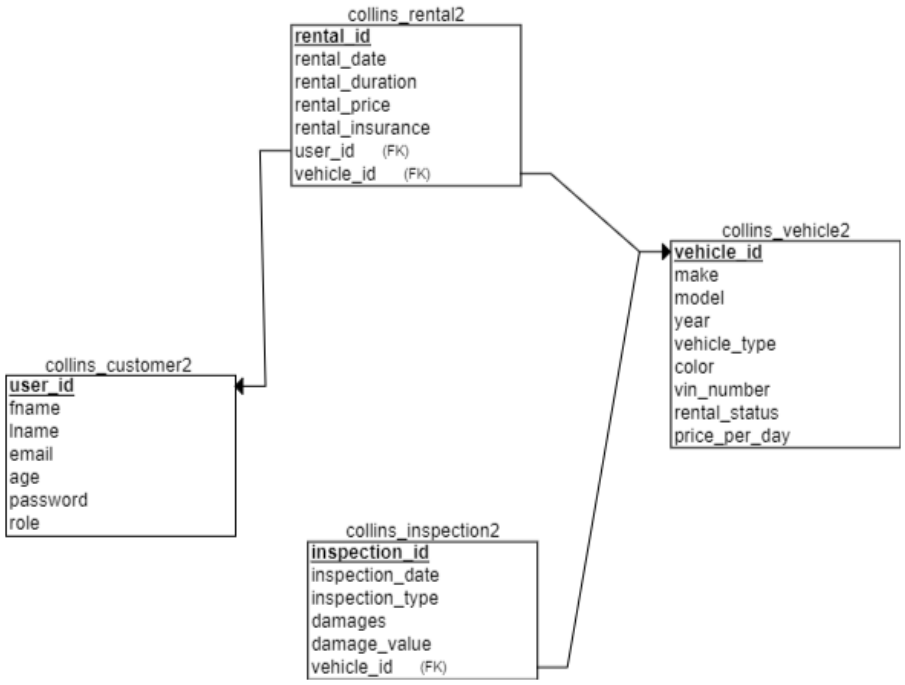
Abby Collins IS437 Final Project

My final project will be a web application designed for renting out cars, specifically cars on the nicer end. This app is versatile and can be used by the employees, as well as the customers. On the customer end, they are able to look at which cars are available, their history of which cars they have rented in the past, and also creating a new rental. For obvious reasons, employees can do more than this. They can add and edit vehicles, users, inspections, as well as create new rentals for customers. The python packages used are time, request, session, redirect, url_for, pymysql, json and flask.

This application is contains four tables in total. The relational scheme can be found below:



The customer table is used for both the customers and the employee, which is why there is a ‘role’ attribute. The inspection table provides information on pre and post inspections of cars, and any damage that may have been done to them. The vehicle table provides all the vehicles the company

offers, along with all the information about the car including models, make etc. The rental table brings all of these together. This is where the employees or customers create the rentals for the vehicle that has been selected.

In order to make the application more functionable, methods such as getAvailableDropDown(), getAvailableVehicles(), and getRentalStatus() were added, along with many others. This application uses a variety of methods and logic in order for it to be able to function the way it should. Object oriented frameworks such as this are very useful, and this application is proof that with certain changes it can be used for a lot of different things.